

DESCRIPTION

The success of cDNA library construction, Northern and S1 analysis and *in vitro* translation is strictly limited by the quality of the RNA that is isolated. Stratagene's RNA isolation kit utilizes a rapid guanidinium thiocyanate/phenol chloroform single-step extraction to isolate undegraded total RNA.

All reagents are functionally tested and routinely used in our custom library department to isolate undegraded, total RNA from tissue and tissue culture cells. The kit provides enough reagents to isolate total RNA from 7 grams of tissue.

CONTENTS

Denaturing solution
Phenol saturated with H₂O
β-mercaptoethanol
Chloroform:isoamyl alcohol
2 M sodium acetate
Isopropanol

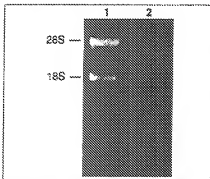
REFERENCES

1. Chirgwin, J.M., et al. (1979) *Biochemistry* 18: 294-299.
2. Chomczynski, P. and Sacchi, N. (1987) *Analytical Biochemistry* 162: 156-159.
3. Maniatis, T., et al. (1982) *J. Molecular Cloning* 190.

RNA Isolation Kit

Catalog # 200345

Price \$165



RNA Isolated with the RNA Isolation Kit

Total RNA was isolated with the RNA isolation kit according to the protocol and run on a 0.8% denaturing agarose gel.

Lane 1: 1 µg of total mouse liver RNA
Lane 2: 1 µg of an RNA marker

DESCRIPTION

The isolation of purified poly(A)⁺ RNA is essential when constructing representative cDNA libraries. The use of poly(A)⁺ RNA vs. total RNA also increases the sensitivity of both S1 analysis and Northern hybridization, allowing the detection of low abundance messages and eliminating the background due to non-specific hybridization of probe molecules to ribosomal RNA bands.

The Poly(A)⁺ Quik® mRNA purification kit provides a convenient, effective system for isolating poly(A)⁺ RNA. The kit allows poly(A)⁺ RNA to be isolated from total RNA in less than 15 minutes and yields are typically greater than 2% of total RNA. Poly(A)⁺ Quik columns work by using applied pressure to a 10 cc luer lock syringe to force total RNA through columns packed with oligo (dT) cellulose. Each Poly(A)⁺ Quik column is designed to accommodate up to 500 µg of total RNA in volumes ranging from 200-1000 µl.

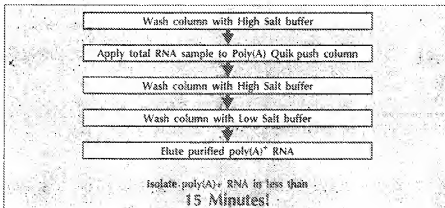
CONTENTS

Poly(A)⁺ Quik® push columns
High salt buffer
Low salt buffer
Elution buffer
10 X sample buffer

REFERENCE

1. Dyaico, M. and Cramer, K. (1989) *Strategies* 2: 42.

* Patents pending

Poly(A)⁺ Quik®
mRNA Isolation Kit*

2 columns

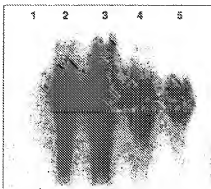
Catalog # 200346

Price \$130

4 columns

Catalog # 200349

Price \$245

Poly(A)⁺ RNA Isolated with the
Poly(A)⁺ Quik® mRNA Isolation Kit

Total RNA was extracted from mouse liver using the Stratagene RNA isolation kit. RNA concentrations were determined by O.D. at 260 nm. One mg of positive control total RNA was passed twice over the Poly(A)⁺ Quik columns. Unbound RNA was eluted by washes of high and medium salt buffers. Poly(A)⁺ RNA was eluted using three 200 µl aliquots of salt-free elution buffer. Transferred filter was radioactively probed.

Lane 1: 5 µg negative control total RNA
Lane 2: 5 µg total RNA from positive transgene
Lane 3: 500 ng from the salt-free elutions
Lane 4: 175 ng from the salt-free elutions
Lane 5: 75 ng from the salt-free elutions

BTECH/
CHEM
LIB
REF

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THE TOOLS OF THE TRADE

...TODAY AND TOMORROW

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